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	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
	10/050,716 01/18/2002		Gregg D. Sucha	· A8287	6834
	7590 10/14/2003		EXAMINER		
	SUGHRUE MION, PLLC			ZAHN, JEFFREY N	
	2100 Pennsylvania Avenue, NW Washington, DC 20037-3213			ART UNIT	PAPER NUMBER
				2828	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

1. **				
	Applicati n N .	Applicant(s)		
Advisory Action	10/050,716	SUCHA ET AL.		
•	Examin r	Art Unit		
	Jeffrey N Zahn	2828	AW	
The MAILING DATE f this c mmunication app	ars on the cever sheet with the c	correspond nc add	ress	
THE REPLY FILED FAILS TO PLACE THIS APPL Therefore, further action by the applicant is required to av final rejection under 37 CFR 1.113 may only be either: (1) condition for allowance; (2) a timely filed Notice of Appeal Examination (RCE) in compliance with 37 CFR 1.114.) a timely filed amendment whicl	ation. A proper reply n places the applica	tion in	
PERIOD FOR RE	PLY [check either a) or b)]			
 a) The period for reply expires 3 months from the mailing date b) The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). 	Advisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing	g date of the final rejection	on.	
Extensions of time may be obtained under 37 CFR 1.136(a). The fee have been filed is the date for purposes of determining the period o fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of t (2) as set forth in (b) above, if checked. Any reply received by the Offic timely filed, may reduce any earned patent term adjustment. See 37 C	of extension and the corresponding amount the shortened statutory period for reply be later than three months after the mai	unt of the fee. The approriginally set in the final	opriate extension Office action; or	
1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFF				
2. The proposed amendment(s) will not be entered be	ecause:			
(a) they raise new issues that would require further	er consideration and/or search (see NOTE below);		
(b) ☐ they raise the issue of new matter (see Note below);				
(c) they are not deemed to place the application in issues for appeal; and/or	n better form for appeal by mate	rially reducing or sir	nplifying the	
(d) they present additional claims without cancelingNOTE:	ng a corresponding number of f	inally rejected claim	S.	
3. Applicant's reply has overcome the following reject	ion(s):			
4. Newly proposed or amended claim(s) would canceling the non-allowable claim(s).	be allowable if submitted in a se	eparate, timely filed	amendment	
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because:		dered but does NO	T place the	
6. The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection.	ause it is not directed SOLELY t	o issues which were	e newly	
7. For purposes of Appeal, the proposed amendments explanation of how the new or amended claims we			and an	
The status of the claim(s) is (or will be) as follows:				
Claim(s) allowed:			,	
Claim(s) objected to:				
Claim(s) rejected: 30-59.				
Claim(s) withdrawn from consideration:				
8. The proposed drawing correction filed on is a	a)□ approved or b)□ disapp	roved by the Exami	ner.	
9. Note the attached Information Disclosure Statemen	nt(s)(PTO-1449) Paper No(s)			
10. Other:		0		
Jah 10/10/2003		SPERBIS		

U.S. Patent and Trademark Office PTOL-303 (Rev. 04-01)

Applicati n No.



Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 31, 35-37, 42-44, 48-53 and 58-59 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for falling to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear/vague what method steps are required to isolate the laser from an external environment.

Regarding Claims 31 and 35, it is unclear/vague what steps "acoustically damped" includes, i.e. how is the claimed device acoustically damped.

Regarding Claim 36, it is unclear/vague what steps are included to "hold to zero a time-averaged cavity length mismatch of the fiber laser Mismatch of the fiber lasers?

Regarding Claim 37, it is unclear/vague what Applicant is claiming; "co-wrapping two fiber lasers on a single spool" without any other step to include the configuration/operation of the fiber lasers recited in the body of the claim is indefinite.

Regarding Claims 42-44, 48-52 and 58-59, it is unclear/vague what steps are include to incorporate a piezoelectric transducer as claimed Regarding Claim 53, it is unclear/vague what structure "means for" refers to in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33, 35 and 37-41, 45-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Byron et al. (US 4847843).

Regarding Claims 30, 37, 41, 45-46, 53, 54 and 57 and all claims that depend therefrom,

Byron et al. discloses a method/device that stabilizes a short-pulse fiber laser that includes;

isolating a fiber laser (abstract) from an external environment;

wrapping said fiber onto a spool (abstract); and

operating the laser while said fiber remains on the said spool (abstract).

Regarding Claim 32, it is inherent of the Byron et al. device that the thermal expansion of the spool and fiber will be substantially equivalent because of the low temperatures associated with liquid nitrogen.

Regarding Claim 33, 35, and 54-56, Byron et al. discloses a temperature-controlled enclosure (abstract; Liquid Nitrogen) as claimed. The enclosure that holds the liquid nitrogen is inherently acoustically damped to some degree.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 34, 36 and 47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Byron et al. (US 4847843) as applied to Claim 30 and 45.

Byron et al. lacks first and second lasers with identical components configured as claimed. However, it would have been obvious to one o ordinary skill in the art at the time of the invention was made to duplicate the fiber laser of Byron et al., since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St Regis Paper Co. v Bemis Co. 193 USPQ 8.